

### **Abstract**

Communication between a service switching point (SSP) and an external (or stand alone) Intelligent Peripheral (IP) has not been defined by any of the standard bodies. ITU-T Q.1600 and ETSI 300 374-1 defines the network configuration of SCP, SSP and stand-alone  
5 IP units using SS7 ISUP connection, but ITU-T Q.1600 and ETSI 300 374-1 does not specify in detail the SS7 ISUP messages for bi-directional communication between a SSP and an IP unit. This invention details the message flow between a SCP, a SSP and an ISUP IP unit, especially in the messages between the SSP and IP unit using SS7 ISUP protocol. With the signaling method of the present invention, SCP can send INAP operations, such as PA, PCUI  
10 to instruct an external IP unit to play an announcement or collect user information, then an IP unit can send back the related operations back to SCP. In this case, the resource of the IP unit can be shared by other switches and SSPs in the network.